

length 8·6; palatal foramina 4·5; upper molar series 3·1; length of m^1 1·7.

Hub. (of type). Chirinda Forest, Melsetter, Rhodesia. Other specimens from Mazøe, Mashonaland (*J. ff. Darling*), and Legogot, Barberton, Transvaal (*Rudd Exploration*).

Type. Adult male. B.M. no. 8. 7. 19. 39. Collected and presented by C. F. M. Swynnerton, Esq.

Four specimens of *D. nigrifrons* from S.E. Africa agree in their strongly buffy undersides in contrast with the greyish or only faintly buffy colour found in East-African and Nigerian specimens of *D. nigrifrons*. Heller has distinguished a *D. spectabilis* (locality Lado) from the Kilima-njaro *D. nigrifrons*, because of its "pearl-grey" and not buffy underparts. But all our East-African specimens are more or less greyish below, and the type was said to have the "underparts white, tinged with yellowish brown." No white of any shade occurs on the Rhodesian form.

XXVII.—*On the Occurrence of the Tropical Fowl Mite (Liponyssus bursa, Berlese) in Australia, and a new Instance of its attacking Man.* By STANLEY HIRST.

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IN a little paper entitled "On a widely distributed Gamasid Mite (*Leiognathus morsitans*, sp. n.), parasitic on the Domestic Fowl"*, I described a blood-sucking mite found on the fowl in several parts of Africa, the Comoro Islands, Mauritius, China, India, the Bahamas, and Columbia. Two instances of this mite attacking Man are given in the paper just mentioned.

Judging from its distribution, I have come to the conclusion that this species is the same as that described by Prof. Antonio Berlese under the name *Leiognathus bursa* from specimens collected at Buenos Aires. Mr. F. W. Urich, Government Entomologist at Trinidad, has recently sent specimens of this mite found on the domestic fowl in that island to the Imperial Bureau of Entomology. The British Museum has just received specimens from Dr. J. Burton Cleland found swarming on a sitting-hen at Sydney, Australia (ii. 1916).

* Bull. Ent. Res. vi. pp. 55-58, 3 text-figs. (1915).

In the same consignment of parasitic Acari, he also sent examples of *L. bursa* found biting human beings at Cremorne, Sydney (10. xii. 1915). Dr. Cleland suggests the possibility of their having come from English starlings building in the house. In his important paper on "Injuries and Diseases of Man in Australia attributable to Animals (except Insects)"*, Dr. Cleland says:—

"*Gamasids from Fowls*.—Gamasids, probably *Dermanyssus avium*, sometimes pass from fowls and chickens to persons handling them, when the irritation they cause produces a rash. An instance of this at Port Pirie, in South Australia, has been mentioned to me, and doubtless many others have occurred."

"*Gamasids from Starlings*.—In Sydney, it has been reported that in some cases, where English starlings have built in the roof, the dwellers in the house have suffered much irritation from mites introduced by the birds. In one case, in a church, it is said that the roof had to be renovated on account of the annoyance caused to the congregation by these creatures. The mites, Dr. T. Harvey Johnston tells me, may prove the same as the one on fowls."

It is probable that both the Gamasids from fowls and starlings mentioned in the above extracts are referable to *L. bursa*, as were those from the same hosts forwarded to me for examination. It is a remarkable fact that the European fowl-mite (*Dermanyssus gallinæ*, Redi) apparently does not thrive in tropical and subtropical countries. I have examined numerous batches of Gamasid fowl-mites from different parts of the tropics, and there has never been a single specimen of *Dermanyssus gallinæ* amongst them. The species sent was always *L. bursa* (*L. morsitans*, mihi). *Liponyssus bursa* can easily be distinguished from *D. gallinæ* by the structure of its chelicerae (mandibles), which are in the form of pincers, instead of each of them being a long fine style; the shape of the dorsal scutum is also very different, &c. The wide distribution of *L. bursa* is possibly due to this mite being carried about by the common sparrow. It is practically certain that when the name *Dermanyssus gallinæ* is met with in reports by entomologists on the parasites of the fowl in tropical countries, *Liponyssus bursa* is the species really concerned.

* J. Trop. Med. xvi. pp. 43-47 (1913); reprinted from Austr. Med. Gaz. (1912).